

## REMARKS

Claims 1, 2 and 4-21 are pending. Claims 1, 13 and 17 are independent.

In the final Office Action, the Examiner states that "Applicant does not distinctly and specifically point out errors in the Examiner Office Action , i.e., point out how Applicant claim's [*sic*] limitations distinguish from the references applied. Applicant merely gives a narrative of Foster's reference rather than focus on how/which limitation in Applicant's claims is not met by Foster." This is incorrect.

The Amendment dated November 16, 2006 discussed on pages 8-10 thereof how Foster and MPEG2 coding fail to teach "the claimed concepts including headers transmitted with the broadcast signal that facilitate memory allocation and progress monitoring,..." and requested "an explanation of how MPEG2 alone teaches these aspects of the claimed invention." See fourth paragraph, page 8 of Amendment dated November 16, 2006.

In the third paragraph on page 8 of the Amendment dated November 16, 2006, the Applicant noted that the Examiner continues "to rely on columns 6-9 of Foster et al to purportedly teach the claimed concepts of headers, memory allocation and progress monitoring." Applicant added that claim 1 was amended "to more clearly recite that the claimed header is in the transmitted broadcast signal and therefore not generated at a receiver, and to include the limitations of dependent claim 3...." See third paragraph on page 8 of Amendment dated November 16, 2006. The remaining paragraphs on pages 8-10 of the Amendment dated November 16, 2006 then discuss how Foster et al does not put a header as claimed in the transmitted signal.

On page 10, lines 5-10 of the Amendment dated November 16, 2006, Applicant states that the Examiner has incorrectly relied on portions of Foster et al "to teach the claimed concepts of allocating memory and monitoring progress of segment storage as claimed."

Thus, Applicant has in fact pointed out claim limitations that distinguish from the applied references (e.g., transmitted broadcast signal having a header as claimed, use of header to allocate memory as claimed, and monitoring progress of segment storage as claimed).

Further, the discussion of how Foster et al fails to teach at least the claimed header being in the transmitted signal of at least independent claim 1 has been an ongoing discussion in the instant application as indicated in the Appeal Brief filed on February 28, 2006, the consideration of which was acknowledged in the Office Action mailed June 16, 2006, as well as in the submitted papers that culminated into the appeal.

In the final Office Action, the Examiner states that Applicant relies on features (i.e., segment codes) not recited in the rejected claims. This is also incorrect. Claim 13 recites that segments are assigned unique identification codes.

### **Claim Rejections – 35 U.S.C. § 103(a)**

1. Claims 1, 4-5, 9, 12, 17 and 18 are rejected under 35 U.S.C §103(a) as being unpatentable over U.S. Patent No. 6,801,536, to Foster et al (hereinafter “Foster et al”) in view of U.S. Patent No. 5,801,781, to Hiroshima et al (hereinafter “Hiroshima et al”).

Applicant respectfully submits that neither Foster et al nor Hiroshima et al, singly or in combination, teaches or suggests at least the following recitations of independent claim 1:

*“storing content from a transmitted broadcast signal using said digital broadcast system, the content comprising data files,*

*said data files each being partitioned into segments that are interspersed in said broadcast signal,*

*said transmitted broadcast signal being provided with at least one header comprising information indicating the number of said segments that constitute at least one of said data files and information to identify each of said segments,*

*use said at least one header in said transmitted broadcast signal to determine the size of at least one section in said memory device to allocate for storing the data file, ...,*

*said at least one header comprising data to indicate how much of said memory device needs to be allocated to store the data file,*

monitor the progress of the storage of said segments in said allocated section, among other recited elements.

Applicant maintains that the Examiner improperly relies on operations of the set top box (STB) on received PES streams described in Foster et al (e.g., creation of sub blocks as described in the referenced text in columns 6-8 of Foster et al) with respect to the transport stream 210 described in columns 4 and 5 of Foster et al. Applicant has set forth the reasons for this improper use of Foster et al in the Amendment dated November 16, 2006 and in the Appeal Brief dated February 28, 2006 and therefore the reasons will not be repeated here.

In addition, the Examiner admits in the final Office Action that Foster et al “does not clearly disclose the use of the header comprising data to indicate how much of the memory device need [*sic*] to be allocated to store the data file.”

Hiroshima et al is relied on to purportedly overcome this deficiency by referring to Fig. 6 therein and specifically to element 122 and column 8, lines 32-45. Element 122 indicates buffer size in a system header 90 as described in column 8, lines 32-45 of Hiroshima et al, but appears to be part of a packet 92 as illustrated in Fig. 6. Although unclear, Applicant assumes the described system header 90 is interpreted as a packet header by the Examiner, and that the buffer size 122 is part of the system header 90, since the final Office Action states that “it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Foster with Hiroshima for having a buffer size with a packet header so to guarantee neither overflow nor underflow of the buffers.”

First, the element 122 for buffer size in Fig. 6 of Hiroshima et al does not teach (1) “said transmitted broadcast signal being provided with at least one header comprising information indicating the number of said segments that constitute at least one of said data files and information to identify each of said segments,” or (2) receiving the transmitted broadcast signal and processing it to obtain at least part of content including the segments, or (3) a processing device connected to the reception device and a memory device for using the header to determine

the size section of the memory device to allocate for storing the data file, as recited in claim 1. Fig. 6 refers to a conversion process for changing an MPEG1 system stream to resultant data as an MPEG2-TS (see Hiroshima et al, column 7, line 58 to column 8, line 7). Thus, the system header 90 with buffer size 122 used in the conversion process do not relate in any way to a transmitted broadcast signal having data files partitioned into segments and a header as claimed that can be used to allocate memory once the transmitted broadcast signal is received.

Second, if the buffer size 122 in Hiroshima et al is interpreted to be in a header of a packet and the system header 90 is relied on to teach a header as recited in claim 1, then Applicant respectfully submits that the system header 90 fails to teach or suggest “at least one header comprising information indicating *the number of said segments that constitute at least one of said data files and information to identify each of said segments*,” as recited in claim 1. The Office Action does not set forth what is regarded in Hiroshima et al as purportedly teaching a segment in a data file as recited in claim 1. For example, assuming that a packet 92 in Hiroshima et al is regarded as arguably teaching a segment in a pack 86 that is, in turn, assumed arguably to be a data file, then the system header 90 does not contain information to identify each of the packets 92,...,94 nor the number of packets in the data file. By contrast, claim 1 recites a header comprising information indicating the number of said segments that constitute at least one of said data files and information to identify each of said segments, among other elements.

Third, as recited in claim 1, the header in the transmitted broadcast signal is used to determine the size of at least one section in a memory device to allocate for storing the data file. Hiroshima et al is silent regarding what the buffer size 122 corresponds to. Thus, Applicant respectfully requests another non-final office action, which clearly articulates the Examiner’s rejections in accordance with 37 C.F.R. 1.104, or allowance of the above-identified application.

Finally, Applicant respectfully submits that a person of ordinary skill in the art at the time of the invention would not have been motivated to combine the teachings of Foster et al and Hiroshima et al as the Examiner suggests. MPEG, which is mentioned in Hiroshima et al and in Foster et al and apparently relied on by the Examiner, does not provide information to determine the size of memory to allocate to store a data file as claimed as the Examiner suggests since

stream ids, presentation time stamps, and the like are for temporary memory consumed by an MPEG decoder for a decoding a packet but not for an entire stream. The temporary buffering of packets by MPEG allows for real-time playback. The Examiner acknowledges on page 4 of the Office Action that Foster with Hiroshima as proposed by the Examiner is to guarantee that neither overflow nor underflow of the buffers occurs. Foster et al describes the "leaky bucket model" of MPEG2 in column 5, lines 61-67 which supports characterization of MPEG as being concerned with temporary buffering for decoding purposes for real-time playback. By contrast, the invention recited in claim 1 uses the header received with the transmitted broadcast signal to determine "the size of at least one section in said memory device to allocate for storing the data file." The header comprises the "information indicating the number of segments that constitute at least one of the data files and information to identify each of said segments," as recited in claim 1. As explained in the present application on page 7, lines 13-25, such partitioning of data files into segments and use of headers to facilitate capture and storage of the received data file obviates the need for a significant amount of the instantaneous broadcast system bandwidth to broadcast the data file as one unit.

To reject claims 4, 5, 9, 12, 17 and 18, the Office Action continues to rely on sections of Foster et al relating to operations of the STB. As discussed by Applicant in the Amendment dated November 16, 2006 and in the Appeal Brief dated February 28, 2006, reliance on the teachings of Foster et al at the STB to reject claims 4, 5, 9, 12, 17 and 18 is improper since Foster et al's sub blocks are not part of the transmitted signal.

Independent claim 17 recites substantially the same aspects of the present invention as claim 1. In view of the foregoing, withdrawal of the rejection of claims 1, 4-5, 9, 12, 17 and 18 under 35 U.S.C §103(a) is respectfully requested.

2. In the Office Action, claims 2, 10 and 19 are rejected under 35 U.S.C §103(a) as being obvious over Foster et al in view of Hiroshima et al and further in view of U.S. Patent No. 5,732,324, to Rieger III (hereinafter "Rieger III"). Claim 2 recites generating an alert message when segments in a data file are received. As recited in claim 1 from which claim 2 depends, a

data file is characterized in a broadcast signal by a header indicating the number of segments that constitute the data file. Rieger III is relied on for its purported disclosure of alerting a user when data segments have been stored in a memory device as claimed in claim 2.

Regarding claim 2, Applicants respectfully submit that Rieger III does not disclose alerting as claimed, and that the Rieger III does not overcome the deficiencies of Foster et al in view of Hiroshima et al stated above. Rieger III teaches sending audio programs from low power transmitters to proximate digital burst radio (PDBR) receiving units in motor vehicles. The programs have preambles identifying programs by a brief textual description and date of creation. Thus, Rieger III does not teach a header comprising information indicating the number of said segments that constitute a data file. Rieger III merely teaches that a receiving unit can use the preamble to filter previously received programs based on the brief textual description and date of creation in the preamble. Rieger III, however, cannot use the preamble to "monitor the progress of storage of said segments" as recited in claim 1. Rieger III merely teaches determining if an entire program is received and stored, and not its progress or parts of the program.

Claim 10 recites determining which segments of a rebroadcast data file have been stored, storing those rebroadcast segments of the data file that are not yet in a memory device and ignoring those rebroadcast segments of the data file that are already stored. Rieger, III discloses filtering programs that are already captured at a receiver, but **not** determining whether parts of programs have been received or not.

Regarding claim 19, Foster et al and Hiroshima et al are deficient for the reasons stated above with respect to claims 17 and 18. Rieger III discloses filtering programs that are already captured at a receiver, but **not** determining whether parts of programs have been received or not. Further, Rieger III does not overcome the deficiencies of Foster et al and Hiroshima et al discussed above.

In view of the foregoing, Applicant respectfully requests withdrawal of the 35 U.S.C §103(a) rejection of claims 2, 10 and 19.

3. In the Office Action, claims 6, 7 and 20-21 are rejected under 35 U.S.C §103(a) as being obvious over Foster et al in view of Hiroshima et al and further in view of U.S. Patent No. 5,815,671, to Morrison (hereinafter "Morrison").

Regarding claim 6, the Office Action acknowledges that Foster et al in view of Hiroshima et al fails to show a data field comprising an expiration data for the data file.

Further, regarding claims 6 and 7, Morrison is relied on for its purported disclosure of message data codes in sent data. Applicant respectfully submits that Morrison does not overcome the deficiencies of Foster et al in view of Hiroshima et al. Morrison does not teach or suggest a data file characterized in a transmitted broadcast signal by a header indicating the number of segments that constitute the data file, among other aspects of the claimed invention.

Claim 20 depends from base claim 17 which recites, among other elements, a portion of memory is allocated to correspond in size to the number of segments in a data file. Claim 20 recites determining that this allocated portion of memory is a selected percentage full before tuning to a scheduled rebroadcast to extract segments not yet received. Accordingly, the inherency argument presented in the Office Action that a storage device is "always a 'percentage full' " does not teach or suggest the allocated memory portion that is monitored for fullness before automatic tuning as claimed. Further, regarding claims 20 and 21, Morrison does not overcome the deficiencies of Foster et al and Hiroshima et al discussed above in connection with claims 1 and 17. Accordingly, Applicant requests withdrawal of this basis for rejecting claims 6, 7, 20 and 21 under 35 U.S.C §103(a).

4. Claim 8 is rejected under 35 U.S.C §103(a) as being obvious over Foster et al in view of Hiroshima et al and further in view of Morrison and further in view of U.S. Patent Application Publication No. US 2003/0212996, to Wolzien (hereinafter "Wolzien"). Paragraph [0058] of Wolzien is relied on for its purported disclosure of code identification information that identifies a type of car for a user profile to facilitate an automated push information operation. Applicant respectfully submits that Wolzien does not overcome the deficiencies of Foster et al

and Hiroshima et al. Further, none of these references singly or in combination teaches or suggests the invention recited in claim 1, the base claim from which claim 8 depends for reasons set forth above. For example, Wolzien does not teach or suggest partitioning of a data file in a broadcast signal into segments and providing headers in the transmitted broadcast signal to indicate the number of segments in a data file, as recited in claim 1. Applicant therefore respectfully requests withdrawal of this basis for rejecting claim 8 under 35 U.S.C §103(a).

5. Claim 11 is rejected under 35 U.S.C §103(a) as being obvious over Foster et al in view of Hiroshima et al and further in view of Rieger III and further in view of Morrison. None of these references, however, singly or in combination teaches or suggests the invention recited in claims 1 or 10, the base and intervening claims from which claim 11 depends for reasons set forth above. Applicant therefore respectfully requests withdrawal of this basis for rejecting claim 11 under 35 U.S.C §103(a).

6. Claims 13-15 rejected under 35 U.S.C §103(a) as being obvious over Foster et al in view of Morrison.

The STC of Foster et al is relied on to purportedly teach providing each segment with a header that identifies the total number of segments and an identification code. Independent claim 13, however, provides the segments to the broadcast signal. Foster et al cannot suggest segment codes as claimed since the STC relied on in Foster et al is a local System Time Clock (i.e., **local to the STB**) that is updated at the STB using the transmitted PCR data and then coded into a header (see column 7, lines 65 through column 8, lines 1-5 and 23-28). Morrison does not overcome the deficiencies of Foster et al. Accordingly, Applicant respectfully requests withdrawal of this basis for rejecting claim 13 and its dependent claims 14-15 under 35 U.S.C §103(a).



7. Claim 16 is rejected under 35 U.S.C §103(a) as being obvious over Foster et al in view of Morrison and further in view of Wolzien. Paragraph [0058] of Wolzien is relied on for its purported disclosure of code identification information that identifies a type of car for a user profile to facilitate an automated push information operation. Applicant respectfully submits that Wolzien does not overcome the deficiencies of Foster et al and Morrison. Further, none of these three references singly or in combination teaches or suggests the invention recited in claim 13, the base claim from which 16 depends for reasons set forth above. For example, Wolzien does not teach or suggest partitioning of a data file in a broadcast signal into segments and providing headers in the transmitted broadcast signal to indicate the number of segments in a data file, as recited in claim 13. Applicant therefore respectfully requests withdrawal of this basis for rejecting claim 16 under 35 U.S.C §103(a).

***Conclusion***

In view of the amendments and arguments set forth above, Applicants submit that the present application is in condition for allowance and would appreciate early notification of the same.

***Invitation for a telephone interview***

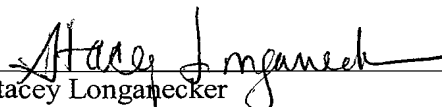
The Examiner is invited to call the undersigned at (202) 659-9076 if further issues remain with allowance of this case.

***Deposit Account Authorization***

Although no fee is believed due by submission of this paper, authorization is hereby made to charge any fees due or outstanding, or credit any overpayment, to Deposit Account No. **18-2220** (Order No. 40554).

Respectfully Submitted,

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